# FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) and ENHANCED NEW SOURCE REVIEW OFFICE OF AIR QUALITY

#### Freeman Products, Inc. 888 South 300 East Knox, Indiana 46534

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 and 326 IAC 2-1-3.2, as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F 149-7678-00009				
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: May 24, 1999			
First Significant Permit Revision 149-13806-00009	Pages Amended: 5, 27, 28, 29			
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 30, 2001			

Freeman Products, Inc.

Permit Reviewer: MES

Knox, Indiana

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 2 of 36 F 149-7678-00009

#### **TABLE OF CONTENTS**

#### A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-8-3(b)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]
- A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]
- A.4 FESOP Applicability [326 IAC 2-8-2]
- A.5 Prior Permit Conditions

#### **B** GENERAL CONDITIONS

- B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]
- B.2 Definitions [326 IAC 2-8-1]
- B.3 Permit Term [326 IAC 2-8-4(2)]
- B.4 Enforceability [326 IAC 2-8-6]
- B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]
- B.6 Severability [326 IAC 2-8-4(4)]
- B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
- B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]
- B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]
- B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]
- B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]
- B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
- B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]
- B.14 Emergency Provisions [326 IAC 2-8-12]
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]
- B.17 Permit Renewal [326 IAC 2-8-3(h)]
- B.18 Permit Amendment or Modification [326 IAC 2-8-10] [326 IAC 2-8-11]
- B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)(2)]
- B.20 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-8-15(b)]
- B.21 Operational Flexibility [326 IAC 2-8-15]
- B.22 Construction Permit Requirement [326 IAC 2]
- B.23 Inspection and Entry [326 IAC 2-8-5(a)(2)]
- B.24 Transfer of Ownership or Operation [326 IAC 2-1-6][326 IAC 2-8-10]
- B.25 Annual Fee Payment [326 IAC 2-8-4(6)][326 IAC 2-8-16]
- B.26 Enhanced New Source Review [326 IAC 2]

#### C SOURCE OPERATION CONDITIONS

#### **Emissions Limitations and Standards [326 IAC 2-8-4(1)]**

- C.1 Overall Source Limit [326 IAC 2-8]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]
- C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

Page 3 of 36

F 149-7678-00009

Permit Reviewer: MES

#### Testing Requirements [326 IAC 2-8-4(3)]

C.8 Performance Testing [326 IAC 3-6]

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- C.9 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]
- C.10 Maintenance of Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]
- C.11 Monitoring Methods [326 IAC 3]
- C.12 Temperature Gauge Specifications Modify for other instruments

#### Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]
- C.14 Compliance Monitoring Plan Failure to Take Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5] [326 IAC 1-6]
- C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

- C.16 Monitoring Data Availability
- C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]
- C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)]

#### **Stratospheric Ozone Protection**

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

#### D.1 FACILITY OPERATION CONDITIONS - One (1) coating line (PO1) & one (1) dip system (PO2)

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9] [326 IAC 8-1-6]
- D.1.2 FESOP Limit [326 IAC 2-8]
- D.1.3 Hazardous Air Pollutants (HAPs) [326 IAC 2-7]
- D.1.4 Catalytic Oxidizer Operation
- D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

#### **Compliance Determination Requirements**

- D.1.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]
- D.1.7 Volatile Organic Compounds (VOC)
- D.1.8 VOC Emissions
- D.1.9 HAPs Emissions

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)

D.1.10 Monitoring

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.11 Record Keeping Requirements

#### D.2 FACILITY OPERATION CONDITIONS - Insignificant Activities

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.2.1 Volatile Organic Compounds
- D.2.2 Volatile Organic Compounds
- D.2.3 Particulate Matter (PM) [326 IAC 6-3]

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 4 of 36 F 149-7678-00009

Permit Reviewer: MES

**Compliance Determination Requirements** 

D.2.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

**Certification Form** 

**Emergency/Deviation Form** 

**Quarterly Compliance Monitoring Report Form** 

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 5 of 36 F 149-7678-00009

Permit Reviewer: MES

#### SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a trophy manufacturing plant.

Responsible Official: Richard Beranek

Source Address: 888 South 300 East, Knox, Indiana 46534

Mailing Address: P.O. Box 37, Knox Indiana 46534

SIC Code: 3914 County Location: Starke

County Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) line for the flow coating of plastic onto metal parts, known as P01, installed in 1992, equipped with a natural gas-fired catalytic oxidizing system, rated at 2.80 million British thermal units per hour, known as AES-2530, installed in 1997, and a solvent rinse tank, all exhausted to Stacks S01 and S02, capacity: 6,000 parts per hour.
- (b) One (1) dip dye system for plastic-coated parts, known as P02, installed in 1992, equipped with one (1) dip dye tank, three (3) solvent rinse tanks, one (1) lateral capture hood and a natural gas-fired catalytic oxidizing system, rated at 2.80 million British thermal units per hour, known as AES-2530, installed in 1997, exhausted to Stack S03, capacity: 3,000 parts per hour.

#### A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) Gypsum handling

#### A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 6 of 36 F 149-7678-00009

#### A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM OAQ shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

**SECTION B** 

**GENERAL CONDITIONS** 

#### B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Page 7 of 36 F 149-7678-00009

#### B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-7 shall prevail.

#### B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

#### B.4 Enforceability [326 IAC 2-8-6]

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

#### B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

#### B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

#### B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

(c) Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAQ, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

Page 8 of 36 F 149-7678-00009

#### B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

#### B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; and
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

#### B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 9 of 36 F 149-7678-00009

Permit Reviewer: MES

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was based on continuous or intermittent data;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

Page 10 of 36 F 149-7678-00009

(c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ.

#### B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or.

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted notice either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 11 of 36 F 149-7678-00009

Permit Reviewer: MES

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

#### B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

Page 12 of 36 F 149-7678-00009

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]
  - (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)]
  - (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
    - (1) That this permit contains a material mistake.
    - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
    - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

Page 13 of 36

F 149-7678-00009

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

#### B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due. [326 IAC 2-5-3]
  - (2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9] If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

B.18 Permit Amendment or Modification [326 IAC 2-8-10] [326 IAC 2-8-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11 whenever the Permittee seeks to amend or modify this permit.

Page 14 of 36 F 149-7678-00009

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

#### B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)(2)]

Notwithstanding 326 IAC 2-8-11(b)(1)(D)(i) and 326 IAC 2-8-11(c)(1), minor permit modification procedures may be used for modifications of this permit involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches to the extent that such minor permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated by U.S. EPA.

#### B.20 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-8-15(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional condition:

For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

#### B.21 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any approval required by 326 IAC 2-1 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 15 of 36 F 149-7678-00009

(4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
  - (1) A brief description of the change within the source;
  - (2) The date on which the change will occur;
  - (3) Any change in emissions; and
  - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-8-15(c)]
  The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]

  The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

Page 16 of 36 F 149-7678-00009

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

#### B.22 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

#### B.23 Inspection and Entry [326 IAC 2-8-5(a)(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-8-5(a)(4)]
  - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAQ, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source.
    - In the event that a claim of confidentiality is so asserted, neither IDEM, OAQ, nor an authorized representative, may disclose the information unless and until IDEM, OAQ, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
  - (2) The Permittee, IDEM, OAQ, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 17 of 36 F 149-7678-00009

Permit Reviewer: MES

#### B.24 Transfer of Ownership or Operation [326 IAC 2-1-6][326 IAC 2-8-10]

Pursuant to 326 IAC 2-1-6 and 2-8-10:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-8-10. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAQ shall reserve the right to issue a new permit.

#### B.25 Annual Fee Payment [326 IAC 2-8-4(6)][326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

#### B.26 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and such facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 18 of 36

F 149-7678-00009

Permit Reviewer: MES

**SECTION C** 

**SOURCE OPERATION CONDITIONS** 

Entire Source

#### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

#### C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
  - (1) The potential to emit any regulated pollutant from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

#### C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

Page 19 of 36 F 149-7678-00009

#### C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

#### C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

#### C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment is in operation.

#### C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

Page 20 of 36 F 149-7678-00009

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
  - The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

#### Testing Requirements [326 IAC 2-8-4(3)]

#### C.8 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by the IDEM,OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.9 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notify:

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 21 of 36

F 149-7678-00009

Permit Reviewer: MES

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### C.10 Maintenance of Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

#### C.11 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

#### C.12 Temperature Gauge Specifications

Whenever a condition in this permit requires the measurement of temperature across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

#### Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

#### (a) Submit:

- (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
- (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 22 of 36 F 149-7678-00009

Permit Reviewer: MES

- (3) A verification to IDEM, OAQ, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAQ, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- C.14 Compliance Monitoring Plan Failure to Take Response Steps [326 IAC 2-8-4][326 IAC 2-8-5] [326 IAC 1-6]
  - (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
    - (1) This condition;
    - (2) The Compliance Determination Requirements in Section D of this permit;
    - (3) The Compliance Monitoring Requirements in Section D of this permit;
    - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
    - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ,. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
      - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
      - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
  - (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
  - (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

to correct the monitoring equipment.

Page 23 of 36 F 149-7678-00009

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken

- (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or:
- (3) An automatic measurement was taken when the process was not operating; or
- (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

#### C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

#### C.16 Monitoring Data Availability

(a) With the exception of performance tests conducted in accordance with Section C- Performance Testing all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

First Significant Permit Revision 149-13806-00009

Page 24 of 36 Amended by: Allen R. Davidson F 149-7678-00009

- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- Temporary, unscheduled unavailability of staff qualified to perform the required observa-(f) tions, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements in (a) above.

#### C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

- Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements:
  - (2) The dates analyses were performed;
  - (3)The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5)The results of such analyses; and
  - (6)The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - All calibration and maintenance records: (3)

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 25 of 36 F 149-7678-00009

- (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C Compliance Monitoring Plan-Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

#### C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

Page 26 of 36 F 149-7678-00009

#### **Stratospheric Ozone Protection**

#### C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 27 of 36 F 149-7678-00009

Permit Reviewer: MES

SECTION D.1

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-8-4(10)]

- (a) One (1) line for the flow coating of plastic onto metal parts, known as P01, installed in 1992, equipped with a natural gas-fired catalytic oxidizing system, rated at 2.80 million British thermal units per hour, known as AES-2530, installed in 1997, and a solvent rinse tank, all exhausted to Stacks S01 and S02, capacity: 6,000 parts per hour.
- (b) One (1) dip dye system for plastic-coated parts, known as P02, installed in 1992, equipped with one (1) dip dye tank, three (3) solvent rinse tanks, one (1) lateral capture hood and a natural gasfired catalytic oxidizing system, rated at 2.80 million British thermal units per hour, known as AES-2530, installed in 1997, exhausted to Stack S03, capacity: 3,000 parts per hour.

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9][326 IAC 8-1-6]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) and 326 IAC 8-1-2 (Compliance Methods), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause or allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 17.3 pounds of VOC per gallon of solids deposited by the flow coating applicators of PO1.
- (b) For the flow coating line PO1:
  - (1) The volume-weighted average VOC content of the coatings used by PO1 shall not exceed 50.8 pounds VOC per gallon of solids deposited.
  - (2) The control device shall maintain a minimum 66.0% overall reduction efficiency for PO1. This minimum overall efficiency is required by 326 IAC 8-1-2(c).
- (c) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (d) For the dip dye system PO2:
  - (1) The control device shall maintain a minimum 40.0% overall reduction efficiency for PO2.
  - (2) The VOC delivered to the applicator of PO2 shall be limited to forty (40) tons per twelve (12) consecutive month period.

Compliance with the minimum overall reduction efficiency and the VOC usage limit shall constitute best available control technology (BACT) pursuant to 326 IAC 8-1-6 (New Facilities: General Reduction Requirements).

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

Page 28 of 36 F 149-7678-00009

#### D.1.2 FESOP Limit [326 IAC 2-8]

These facilities shall emit a total of no more than ninety-six (96.0) tons of VOC after control, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive months. This usage limit is required to limit the total source potential to emit VOC to less than one hundred (100) tons per twelve (12) consecutive months. Compliance with this limit fulfills the requirements of 326 IAC 2-8 (FESOP).

#### D.1.3 Hazardous Air Pollutants (HAPs) [326 IAC 2-7]

The hazardous air pollutant emissions shall be limited as follows:

- (a) The amount of any single hazardous air pollutant (HAP) emitted after control shall not exceed ten (10) tons per consecutive twelve (12) month period.
- (b) The amount of any combination of HAPs emitted after control shall not exceed twenty-five (25) tons per consecutive twelve (12) month period.

Therefore, the requirements of 326 IAC 2-7 do not apply.

#### D.1.4 Catalytic Oxidizer Operation

The catalytic oxidizer shall operate at all times when PO1 and/or PO2 are operated. When operating, the catalytic oxidizer shall maintain a minimum operating temperature of 575 degrees Fahrenheit or a temperature, fan amperage and duct velocity determined in a stack test to maintain a minimum 95.0% destruction of the volatile organic compound (VOC) captured.

#### D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

#### **Compliance Determination Requirements**

#### D.1.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

During the period between 60 and 180 days after issuance of this permit, the Permittee shall perform VOC testing of the catalytic oxidizer exhausting through Stacks S01, S02 and S03 to determine the capture and destruction efficiencies for overall VOC control utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facilities are in compliance.

#### D.1.7 Volatile Organic Compounds (VOC)

Compliance with the VOC content limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

Page 29 of 36 F 149-7678-00009

#### D.1.8 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent twelve (12) consecutive month period.

#### D.1.9 HAPs Emissions

Compliance with Condition D.1.3 shall be demonstrated at the end of each twelve (12) consecutive month period based on the total HAPs usage for the most recent twelve (12) month period.

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### D.1.10 Monitoring

- (a) Daily records of the catalytic oxidizer exhaust temperature, fan amperage and duct velocity shall be observed on each day when PO1 and/or PO2 are operated. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

#### D.1.11 Record Keeping Requirements

- (a) To document compliance, the Permittee shall maintain records at the facility of the materials used in PO1 and PO2 that contain any VOCs and HAPs. The records shall be complete and sufficient to establish compliance with the VOC content and VOC usage limits and HAPs limits.
- (b) To document compliance with Condition D.1.4, the Permittee shall maintain records of the daily exhaust temperature, fan amperage and duct velocity or indicate that neither PO1 nor PO2 operated.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 30 of 36 F 149-7678-00009

Permit Reviewer: MES

#### **FACILITY OPERATION CONDITIONS**

#### SECTION D.2

#### Facility Description [326 IAC 2-7-5(15)] - Insignificant Activities

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) Gypsum handling

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a matter that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

#### D.2.2 Volatile Organic Compounds (VOC)

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:
  - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
    - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
    - (B) The solvent is agitated; or
    - (C) The solvent is heated.
  - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 31 of 36 F 149-7678-00009

internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
  - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
  - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
  - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
  - (1) Close the cover whenever articles are not being handled in the degreaser.
  - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
  - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

#### D.2.3 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the gypsum handling operation shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

where E =rate of emission in pounds per hour; and

P = process weight rate in tons per hour

Page 32 of 36

F 149-7678-00009

#### **Compliance Determination Requirement**

 $E = 55.0 P^{0.11} - 40$ 

#### D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

Page 33 of 36 F 149-7678-00009

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF Air Quality COMPLIANCE DATA SECTION

### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Freeman Products, Inc.

Source Address: 888 South 300 East, Knox, Indiana 46534

Mailing Address: P.O. Box 37, Knox, Indiana 46534

FESOP No.: F 149-7678-00009

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.					
Please check what document is being certified:					
9 Annual Compliance Certification Letter					
9 Test Result (specify)					
9 Report (specify)					
9 Notification (specify)					
9 Other (specify)					
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.					
Signature:					
Printed Name:					
Title/Position:					
Date:					

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

Page 34 of 36 F 149-7678-00009

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF Air Quality COMPLIANCE DATA SECTION**

P.O. Box 6015 100 North Senate Avenue Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967

#### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) **EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Freeman Products, Inc.

888 South 300 East, Knox, Indiana 46534 Source Address:

Mailing Address: P.O. Box 37, Knox, Indiana 46534

FESOP No.: F 149-7678-00009

This form consists of 2 pages				e 1 of 2	
Ch	Check either No. 1 or No.2				
9	1.	This is	s an emergency as defined in 326 IAC 2-7-1(12)		
		C	CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and The Permittee must submit notice in writing or by facsimile within two (2) days (Fac Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16		
9	2.	This is	s a deviation, reportable per 326 IAC 2-7-5(3)(c)		
		С	The Permittee must submit notice in writing within ten (10) calendar days		

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

Freeman Products, Inc.

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson Page 35 of 36 F 149-7678-00009

Knox, Indiana Permit Reviewer: MES

If any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency/Deviation started:	
Date/Time Emergency/Deviation was corrected:	
Was the facility being properly operated at the time of the emergency/deviation? Y Describe:	Ν
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency/deviation:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are necessimminent injury to persons, severe damage to equipment, substantial loss of capital investof product or raw materials of substantial economic value:	
Form Completed by:	_
Title / Position:	_
Date:	_
Phone:	

First Significant Permit Revision 149-13806-00009 Amended by: Allen R. Davidson

Permit Reviewer: MES

Page 36 of 36 F 149-7678-00009

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF Air Quality COMPLIANCE DATA SECTION

## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) QUARTERLY COMPLIANCE MONITORING REPORT

Source Name: Source Address: Mailing Address: FESOP No.:	ource Address: 888 South 300 East, Knox, Indiana 46534 ailing Address: P.O. Box 37, Knox, Indiana 46534							
M	onths:	to _	Year:					
This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/ Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".								
9 NO DEVIATIONS	9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD							
9 THE FOLLOWIN	G DEVIATION	IS OCCURR	ED THIS REPORTING PERIO	DD.				
Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)			Number of Deviations	Date of each Deviation				
	Form Complet	ed By:						
	Title/Position:							
I	Date:							
	Phone:							

Attach a signed certification to complete this report.

# Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP)

#### **Source Background and Description**

Source Name: Freeman Products, Inc.

Source Location: 888 South CR 300 East, Knox, IN 46354

County: Starke SIC Code: 3914

Operation Permit No.: 149-7678-00009
Operation Permit Issuance Date: May 24, 1999
Revision No.: 149-13806-00009
Permit Reviewer: Allen R. Davidson

On January 19, 2001, the Office of Air Quality (OAQ) received an application from Freeman Products, Inc. relating to changes in permit language involving the following equipment:

- (a) One (1) line for the flow coating of plastic onto metal parts, known as P01.
- (b) One (1) dip dye system for plastic-coated parts, known as P02.

Emissions from these facilities are controlled by a natural gas-fired catalytic oxidizing system, rated at 2.80 million British thermal units per hour, known as AES-2530.

#### **History**

Freeman Products, Inc. was issued a federally enforceable state operating permit (FESOP) for a trophy manufacturing plant on May 24, 1999. A request for revision was submitted on August 19, 1999 but canceled on August 26, 1999. This will be the first actual revision to the permit.

#### **Enforcement Issues**

There are no enforcement actions pending against this emission source.

#### **Stack Summary**

Stack information will not be changed as a result of this revision.

#### Recommendation

The staff recommends to the Commissioner that the revision be approved as a significant permit revision. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on January 19, 2001.

Freeman Products, Inc. Page 2 of 7
Knox. IN 46354 149-13806-00009

Reviewer: Allen R. Davidson

#### **Emission Calculations**

Facility PO2, which dyes the plastic on plastic-coated parts, will be treated as surface coating of plastic parts instead of metal parts. The dye does not contact the metal portion of the parts. This change will subject the facility to 326 IAC 8-1-6 instead of 326 IAC 8-2-9. VOC emissions from PO2 will be limited to 24.0 tons per year.

The equivalent emission limit under 326 IAC 8-1-2 will be recalculated without the coatings used by PO2. The overall reduction efficiency required under 326 IAC 8-1-2 will also be recalculated based on the new equivalent emission limit.

See Appendix A of this document for detailed emissions calculations. (5 pages)

The following changes are being proposed for the FESOP:

#### A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary a plastic molding injection source trophy manufacturing plant.

Responsible Official: Richard Beranek

Source Address: 888 South 300 East, Knox, Indiana 46534

Mailing Address: P.O. Box 37, Knox Indiana 46534

SIC Code: 3914 County Location: Starke

County Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) line for the flow coating of plastic and onto metal parts, known as P01, installed in 1992, equipped with a natural gas-fired catalytic oxidizing system, rated at 2.80 million British thermal units per hour, known as AES-2530, installed in 1997, and a solvent rinse tank, all exhausted to Stacks S01 and S02, capacity: 6,000 parts per hour.
- (b) One (1) dip dye system for the coating of plastic and metal plastic-coated parts, known as P02, installed in 1992, equipped with one (1) dip dye tank, three (3) solvent rinse tanks, one (1) lateral capture hood and a natural gas-fired catalytic oxidizing system, rated at 2.80 million British thermal units per hour, known as AES-2530, installed in 1997, exhausted to Stack S03, capacity: 3,000 parts per hour.

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9][326 IAC 8-1-6]

(a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) and 326 IAC 8-1-2 (Compliance Methods), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause or allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of 4.3 pounds of VOC per gallon of coating excluding water for clear coatings delivered to 17.3 pounds of VOC per gallon of solids deposited by the flow coating applicators of PO1 and the dip dye applicator system of PO2.

Page 3 of 7 149-13806-00009

Freeman Products, Inc. Knox, IN 46354 Reviewer: Allen R. Davidson

(b) When operating a catalytic oxidizer to achieve the limit for 326 IAC 8-2-9 for the flow coating line PO1 of 4.3 pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator, the catalytic oxidizer shall maintain a minimum ninety-five (95%) percent capture efficiency and ninety-five (95%) percent destruction efficiency. These efficiencies and the use of the catalytic oxidizer are required by 326 IAC 8-1-2(a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of ninety and one-quarter (90.25%) percent, the VOC content of the coating shall not exceed one hundred and seven (107) pounds per gallon of coating solids delivered to the applicator.

#### For the flow coating line PO1:

- (1) The volume-weighted average VOC content of the coatings used by PO1 shall not exceed 50.8 pounds VOC per gallon of solids deposited.
- (2) The control device shall maintain a minimum 66.0% overall reduction efficiency for PO1. This minimum overall efficiency is required by 326 IAC 8-1-2(c).
- (c) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (d) Pursuant to 326 IAC 8-1-6, BACT for the plastic coating operations was determined to be the utilization of the as-installed catalytic oxidizer with a capture efficiency of ninety-five (95%) percent for P01 and ninety (90.0%) percent for P02. Accounting for the destruction efficiency of ninety-five (95%) percent, the overall control efficiency of the catalytic oxidizer for P01 is ninety and one-quarter (90.25%) percent and eighty five and one half (85.5%) percent for P02. The maximum as-applied VOC content of coatings applied to plastic shall not exceed of one hundred and seven (107) pounds of VOC per gallon of applied solids.

That the input of VOC to PO1 and PO2 and the usage of cleanup solvents for coating plastic shall be limited by the following equation:

X (1-.9025) + Y (1-.855) = 96.0 tons of VOC per twelve (12) consecutive months

where X = VOC input to PO1 applicator, and
Y = VOC input to PO2 applicator.

This limitation is based upon the use of the catalytic oxidizer for PO1 and PO2 with an overall control efficiency of ninety and one quarter (90.25%) percent for PO1 and eighty five and one half (85.5%) percent for PO2.

#### For the dip dye system PO2:

- (1) The control device shall maintain a minimum 40.0% overall reduction efficiency for PO2.
- (2) The VOC delivered to the applicator of PO2 shall be limited to forty (40) tons per twelve (12) consecutive month period.

Compliance with the minimum overall reduction efficiency and the VOC usage limit shall constitute best available control technology (BACT) pursuant to 326 IAC 8-1-6 (New Facilities: General Reduction Requirements).

Freeman Products, Inc.

Page 4 of 7

Knox. IN 46354

149-13806-00009

Reviewer: Allen R. Davidson

#### D.1.3 Hazardous Air Pollutants (HAPs) [326 IAC 2-7]

The hazardous air pollutant emissions shall be limited as follows:

- (a) The amount of any single hazardous air pollutant (HAP) emitted after control shall not exceed ten (10) tons per consecutive twelve (12) month period.
- (b) The amount of any combination of HAPs emitted after control shall not exceed twentryfive twenty-five (25) tons per consecutive twelve (12) month period.

Therefore, the requirements of 326 IAC 2-7 do not apply.

#### D.1.4 Catalytic Oxidizer Operation

- The catalytic oxidizer shall operate at all times when PO1 and/or PO2 are operated. When operating, the catalytic oxidizer shall maintain a minimum operating temperature of 575 degrees Fahrenheit or a temperature, fan amperage and duct velocity determined in a stack test to maintain a minimum ninety (90) percent 95.0% destruction of the volatile organic compound (VOC) captured.
- (b) When operating the oxidizer, the oxidizer shall maintain a minimum ninety (90) percent capture efficiency and ninety five (95) percent destruction efficiency. These efficiencies and the use of the oxidizer are required by rule 326 IAC 8-1-2(a)(2).

#### D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

(a) A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

#### D.1.11 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1(d), the Permittee shall maintain records at the facility of the materials used in PO1 and PO2 that contain any VOCs and HAPs. The records shall be complete and sufficient to establish compliance with the VOC content and VOC usage limits pursuant to 326 IAC 8-2-9, 326 IAC 8-1-6 and 326 IAC 2-8 as well as the and HAPs limits pursuant to 326 IAC 2-8.
- (b) To document compliance with Condition D.1.4, the Permittee shall maintain records of the daily exhaust temperature, fan amperage and duct velocity or indicate that neither PO1 nor PO2 operated.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Reviewer: Allen R. Davidson

The following table reflects the existing source potential to emit. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit:

Pollutant	Potential To Emit (tons/year)
PM	0
PM-10	0
SO <sub>2</sub>	0
VOC	25.9
СО	0
NO <sub>x</sub>	0

HAP's	Potential To Emit (tons/year)
Single	<7.62
TOTAL	7.62

The potential to emit (as defined in 326 IAC 2-1.1-1(16)) is limited to less than the Part 70 applicability levels by the issuance of a FESOP.

The revision's potential to emit is follows:

Pollutant	Potential To Emit (tons/year)
PM	0
PM-10	0
SO <sub>2</sub>	0
VOC	33.1
СО	0
NO <sub>x</sub>	0

HAP	Potential To Emit (tons/year)
TOTAL	0.9

The potential to emit (as defined in 326 IAC 2-7-1(29)) volatile organic compounds (VOC) will increase by greater than 25 tons per year. Therefore, the revision is classifiable as a significant permit modification under 326 IAC 2-8-11.1.

This revision is not a major modification for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 because the increase in potential to emit every attainment pollutant is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

#### **County Attainment Status**

The source is located in Starke County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
СО	attainment
Lead	attainment

Freeman Products, Inc. Page 6 of 7
Knox. IN 46354 149-13806-00009

Reviewer: Allen R. Davidson

Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and  $NO_{\chi}$  emissions are considered when evaluating the rule applicability relating to the ozone standards. Starke County has been designated as attainment or unclassifiable for ozone.

#### **Federal Rule Applicability**

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

#### State Rule Applicability - Entire Source

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control). The source was existing as of July 27, 1997, this revision is not classified as a reconstruction under 40 CFR 63.41, and the revision does not by itself have potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAPs.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it does not have the potential to emit more than one hundred (100) tons per year of any pollutant specified in the rule.

#### State Rule Applicability - Flow Coating Line PO1

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator shall be limited to 4.3 pounds of VOCs per gallon of coating less water, for clear coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

326 IAC 8-1-2 (Compliance Methods)

Pursuant to 326 IAC 8-1-2 (Compliance Methods), the source will comply with 326 IAC 8-2-9 by using a catalytic oxidizer to control VOC emissions to an equivalent emission limit of 17.3 pounds VOC per gallon of solids deposited. The rule requires a minimum overall reduction efficiency of 66.0% to comply with the equivalent emission limit. Prior tests indicate that the control device meets the minimum requirement. See Appendix A for detailed calculations. (5 pages)

Page 7 of 7 149-13806-00009

Freeman Products, Inc. Knox, IN 46354

Reviewer: Allen R. Davidson

#### State Rule Applicability - Dip Dye System PO2

326 IAC 8-2-9 (Miscellaneous Metal Coating)

This facility is not subject to 326 IAC 8-2-9. Although the source belongs to one of the Standard Industrial Classification (SIC) codes mentioned in the rule, the coatings applied by this facility do not come into contact with the metal portion of the plastic-coated parts processed.

326 IAC 8-1-6 (General VOC Reduction Requirements)

This facility is subject to 326 IAC 8-1-6 (General Reduction Requirements). This rule requires best available control technology (BACT) for facilities not otherwise regulated by 326 IAC 8 where potential VOC emissions are 25 tons per year or more.

The potential to emit volatile organic compounds will be controlled by the following:

- (1) The control device shall maintain a minimum 40.0% overall reduction efficiency for PO2.
- (2) The VOC delivered to the applicator of PO2 shall be limited to forty (40) tons per twelve (12) consecutive month period.

The combination of the VOC usage limit and the control device will constitute BACT for this facility.

#### Conclusion

The operation of these facilities shall be subject to the conditions of the attached significant permit revision, No 149-13806-00009.

5.79 lb VOC/gal coating

6.54 lb VOC/gal VOC

100% transfer efficiency

## Appendix A: Emissions Calculations VOC and Particulate From Surface Coating Operations

Company Name: Freeman Products, Inc.

Address City IN Zip: 888 South 300 East, Knox IN 46534

**ID:** 149-13806-00009 **Reviewer:** Allen R. Davidson

Date: 02/12/01

Material	Density (Lb/Gal)		Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
DP-76 (Synthetic Varnish)	7.20	69.44%	0.0%	69.4%	0.0%	28.00%	0.00010	6000.000	5.00	5.00	2.94	70.51	12.87	0.00	17.86	100%
AB-35 (Synthetic Varnish)	7.60	61.84%	0.0%	61.8%	0.0%	31.00%	0.00012	6000.000	4.70	4.70	3.48	83.52	15.24	0.00	15.16	100%
Naptha	6.26	100.00%	0.0%	100.0%	0.0%	0.00%	0.00045	6000.000	6.26	6.26	17.05	409.30	74.70	0.00	ERR	100%
		•			•											

109850.5 lb VOC /

109850.5 lb VOC /

18965 gallon =

16802.55117 gallon =

 State Potential Emissions
 23.47
 563.33
 102.81
 0.00

**METHODOLOGY** 

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \* (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

Material		Weight % Organics		Gallons coating used / yr	Gallons VOC used / yr	Pounds VOC Used / Yr
DP-76 (Synthetic Varnish)	5.00	69.44%		2750	1909.722	13750.0
AB-35 (Synthetic Varnish)	4.70	61.84%		3465	2142.829	16285.5
Naptha	6.26	100.00%		12750	12750	79815.0
Total			-	19065	16902.55	100950 5

Total 18965 16802.55 109850.5  $E = L/((1-(L/D))^*T) = 50.80 \text{ lb VOC/gal solids}$ 

Gallons solids applied = gallons coating used - gallons VOC used;

2162.45 8.77

Gallons coating / gallon solids applied:
Since E exceeds the regulatory limit of

Tons VOC Emitted / Year (actual):

17.3 lb VOC/gal solids, a VOC control device is required.

O = 50.80 - 17.3 =

65.94% minimum reduction efficiency

L=

D=

T =

00.00

Tons VOC Emitted / Year (maximum hours and minimum control efficiency): 35.01 ton/yr

9.79

Tons VOC Used / Year (actual): 54.93

Results of tests: 82.7

82.17% actual reduction efficiency

## Appendix A: Emission Calculations HAP Emission Calculations

Company Name: Freeman Products, Inc.

Address City IN Zip: 888 South 300 East, Knox IN 46534

**ID:** 149-13806-00009 **Reviewer:** Allen R. Davidson

Date: 02/12/01

Material	Density (Lb/Gal)		Maximum (unit/hour)		Weight % HAP#2	Weight % HAP#3	Weight % HAP#4	Weight % HAP#5	Weight % HAP#6	Weight % HAP#7	Emissions HAP#1 (ton/yr)	Emissions HAP#2 (ton/yr)	Emission s HAP#3 (ton/yr)	Emissions HAP#4 (ton/yr)	Emissions HAP#5 (ton/yr)	Emissions HAP#6 (ton/yr)	Emissions HAP#7 (ton/yr)
DP-76 (Synthetic Varnish)	7.20	0.00010	6000	14.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.59	3.71	0.00	0.00	0.00	0.00	0.00
AB-35 (Synthetic Varnish)	7.60	0.00012	6000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Naptha	6.26	0.00045	6000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total State Potential Emissions 2.59 3.71 0.00 0.00 0.00 0.00 0.00 0.00

#### **METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

#### LEGEND

HAP#1 = Xylene
HAP#2 = MIBK (methyl isobutyl ketone)
HAP#3 = n/a
HAP#4 = n/a
HAP#5 = n/a
HAP#6 = n/a
HAP#7 = n/a

Total HAP emissions (before control) 6.30046 ton/yr Total HAP emissions (after control) 2.14567 ton/yr

# Appendix A: Emissions Calculations VOC and Particulate From Surface Coating Operations

Company Name: Freeman Products, Inc.

Address City IN Zip: 888 South 300 East, Knox IN 46534

**ID:** 149-13806-00009 **Reviewer:** Allen R. Davidson

Date: 02/12/01

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics		Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
PRG-3 (Dip Dye Concentrate)	7.30	81.00%	18.0%	63.0%	20.0%	2.00%	0.00027	3000.000	5.75	4.60	3.79	91.04	16.61	0.00	229.95	100%
Acetone	6.59	0.00%	0.0%	0.0%	0.0%	0.00%	0.00014	3000.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	100%
Isopropyl Alcohol	6.59	100.00%	0.0%	100.0%	0.0%	0.00%	0.00060	3000.000	6.59	6.59	11.85	284.32	51.89	0.00	ERR	100%

State Potential Emissions 15.64 375.36 68.50 0.00

**METHODOLOGY** 

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

The following calculations determine the volume percent of acetone in PRG-3:

7.3 lb/gal = 18% acetone = 1.314 lb acetone

1.314 lb acetone = 0.199461 gallons acetone or 19.95%

6.58777 lb/gal

Control efficiency will be at least 40% to render 326 IAC 8-1-6 as not applicable.

Also, VOC usage will be limited to 40 tons/year to render 326 IAC 8-1-6 as not applicable.

Tons VOC Emitted / Year (maximum hours and minimum control efficiency): 24.00 ton/yr

Tons VOC Used / Year (actual): 36.60 Results of tests: 42.57% actual reduction efficiency

Tons VOC Emitted / Year (actual): 21.02

## Appendix A: Emission Calculations HAP Emission Calculations

Company Name: Freeman Products, Inc.

Address City IN Zip: 888 South 300 East, Knox IN 46534

**ID:** 149-13806-00009 **Reviewer:** Allen R. Davidson

Date: 02/12/01

Material	Density (Lb/Gal)		Maximum (unit/hour)		Weight % HAP#2	Weight % HAP#3	Weight % HAP#4	Weight % HAP#5	Weight % HAP#6	Weight % HAP#7	Emissions HAP#1 (ton/yr)	Emissions HAP#2 (ton/yr)	Emission s HAP#3 (ton/yr)	Emissions HAP#4 (ton/yr)	Emissions HAP#5 (ton/yr)	Emissions HAP#6 (ton/yr)	Emissions HAP#7 (ton/yr)
PRG-3 (Dip Dye Concentrate)	7.30	0.00027	******	22.00%	18.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.80	4.75	0.00	0.00	0.00	0.00	0.00
Acetone	6.59	0.00014	*****	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Isopropyl Alcohol	6.59	0.00060	******	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
									•								

Total State Potential Emissions 5.80 4.75 0.00 0.00 0.00 0.00 0.00 0.00

#### **METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

#### LEGEND

 HAP#1 =
 diacetate ethanol (diethanolamine)

 HAP#2 =
 methanol

 HAP#3 =
 n/a

 HAP#4 =
 n/a

 HAP#5 =
 n/a

 HAP#6 =
 n/a

 HAP#7 =
 n/a

Total HAP emissions (before control) 10.5487 ton/yr Total HAP emissions (after control) 6.32921 ton/yr

### **Appendix A: Emission Calculations**

Company Name: Freeman Products, Inc.

Address City IN Zip: 888 South 300 East, Knox IN 46534

**ID:** 149-13806-00009 **Reviewer:** Allen R. Davidson

0.85 ton/yr

**Date:** 02/12/01

### Controlled PTE of PO1 and PO2

Difference

VOC

**HAPs** 

prior to revision: after revision:	25.90 ton/yr 59.01 ton/yr	
Difference	33.11 ton/yr	
prior to revision: after revision:	7.62 ton/yr 8.47 ton/yr	
allei levisioli.	0.47 (01)/91	